

## ABSTRACT

Systems and methods are described for replicating virtual memory translation from a target computer on a host computer, and debugging a fault that occurred on the target computer on the host computer. The described techniques are utilized on a target computer having a processor that has halted execution. Virtual to physical address translation data from the target computer is transferred to the host computer. The host computer utilizes the virtual to physical address translation data to access data pointed by virtual memory addresses that were used by the target computer, and then debugs a fault by accessing the data by reading the physical memory address on the host computer. After the virtual to physical memory address translation data have been acquired, they can be cached at the host computer.